

REMARKS

The Office Action of December 8, 2008 has been received and its contents carefully considered.

The present Amendment cancels claim 1, 7, 14, and 17. Accordingly, the rejection of these claims for anticipation (see section 8 of the Office Action) is now moot.

The present Amendment also revises the remaining claims to improve the idiomatic English and to otherwise increase their definiteness under US claim-drafting practice. In view of the changes that have been made, it is respectfully submitted that the claim objections (see section 6 of the Office Action) should be withdrawn.

In addition, the present Amendment revises the specification to introduce terminology that is now employed in the claims.

Beginning with the description of the second embodiment, the present application discloses a technique in which PN codes are used during watermarking of documents. In an example that is shown in Figure 26 of the application's drawings, for example, bits of watermark information are depicted by a PN code or a reversed PN code (see, for example, the passage at page 31 of the application, lines 3-17). This increases the precision of the detection of the watermark information (see, for example, the passage at page 33 of the application, line 9 to page 34, line 4).

Section 10 of the Office Action rejects all of the claims that are now pending in this application for obviousness based on a published US application by Suzuki in view of a US patent by Tewfik et al. This reference will hereafter be called simply "Tewfik" for the sake of convenient discussion. For the reasons discussed below, it is respectfully submitted that the independent claims now pending in this application (that is, claims 2, 5, 8, 15, 18, and 20 are patentable over these references).

In the Suzuki application, watermark information is printed in unit patterns having wave directions that represent samples of the watermark information. In the Tewfik reference, watermark information may be provided in form of a PN code, or host data may be spread using a PN code.

Independent claim 2 recites "a watermark image generating section for representing units of watermark information using the at least one PN code, generating representational watermark information, and generating a watermark image in which the representational

watermark information is denoted by dot patterns.” This is not disclosed or suggested by Suzuki. And although Tewfik uses a PN code in his technique, the reference neither discloses nor suggests representing units of watermark information using a PN code or codes. Accordingly, it is respectfully submitted that the invention defined by claim 2 would not have been obvious from the references.

For similar reasons, it is respectfully submitted that the inventions defined by the remaining independent claims are patentable over the references. For example, independent claim 5 recites “a watermark image generating section for using the two-dimensional PN codes to represent units of watermark information ...” and independent claim 8 recites “a watermark information detector ...” that is used to extract units of watermark information which are represented by at least one PN code. Independent claim 15 recites “generating a watermark image using a watermark information embedding apparatus to represent units of watermark information by at least one PN code.” In independent claim 18, a watermark image is extracted in step (a), and units of watermark information are represented by at least one PN code in this watermark image. Finally, independent claim 20 recites “generating a watermark image by using at least one PN code to represent units of watermark information.” It is respectfully submitted that none of these features of the independent claims are suggested by the reference.

The remaining claims depend from the independent claims discussed above and recite additional limitations to further define the invention, so they are automatically patentable along with their independent claims and need not be further discussed.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,



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